What is claimed is:

~~CLAIMS~~

1. A vaccine comprising membrane-bound polypeptide having exposed antigenic determinants capable of raising neutralizing antibodies against a pathogen, said polypeptide being functionally associated with a membrane of a recombinant, stable, continuous cell line capable of its production.

2. A vaccine comprising a membrane-free derivative of a membrane-bound polypeptide, having exposed antigenic determinants capable of raising neutralizing antibodies against a pathogen, in which the polypeptide first is formed functionally associated with a membrane of a recombinant stable, continuous cell line capable of its production and then dissolved free from said membrane.

3. A vaccine according to Claim 1 or Claim 2 wherein the recombinant host cell is a stable eukaryotic cell line.

4. A vaccine according to Claim 1 or Claim 2 wherein the host cell is a mammalian cell line.

5. A vaccine according to Claim 3 or Claim 4 wherein the cell line is deficient in the production of dihydrofolate reductase (dhfr) and contains an expression vector incorporating a dhfr selectable marker and a gene coding for said polypeptide.

6. A vaccine of Claims 1-5 wherein the polypeptide comprises at least one glycoprotein of herpes simplex virus type 1 or type 2, and said pathogen is herpes simplex virus type 1 and/or type 2.

7. The vaccine of Claim 6 in which said glycoprotein comprises a gD.

8. The vaccine of Claim 6 in which said glycoprotein comprises a gC.

9. The vaccine of Claim 6 in which said polypeptide comprises a mixture of glycoprotein C and glycoprotein D.

10. A vaccine comprising a truncated, membrane-free derivative of a membrane-bound polypeptide, said derivative being devoid of membrane-binding domain whereby the derivative polypeptide is free of said membrane, and having exposed antigenic determinants capable of raising neutralizing antibodies against a pathogen.

11. A vaccine according to Claim 10 wherein the truncated polypeptide is a derivative of a glycoprotein D of a herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex virus type 1 and/or type 2.

12. A vaccine according to Claim 10 wherein the truncated polypeptide is a derivative of a glycoprotein C of a herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex virus type 1 and/or type 2.

~~13~~. A vaccine according to Claim ~~11~~ wherein the truncated derivative comprises the N-terminal region of gD polypeptide up to about amino acid residue 300.

~~14~~. A method of producing a vaccine according to ~~any one of Claims 10 to 13~~ wherein DNA encoding said membrane-bound polypeptide is prepared lacking coding for membrane-binding domain, incorporating the DNA into an expression vector, transfecting a host cell with said vector, and collecting the truncated polypeptide as a secretion product.

~~15~~. A method according to Claim ~~14~~ wherein the transfected host cell is a stable eukaryotic cell line.

~~16~~. A method according to Claim ~~15~~ wherein the transfected host cell is a mammalian cell line.

17. A method according to Claim 15 or Claim 16 wherein the cell line is deficient in the production of dhfr and the vector contains a dhfr selectable marker.

18. A method according to ~~any one of Claims 14 to 16~~ wherein the truncated polypeptide is a glycoprotein D of herpes simplex virus type 1 or type 2.

19. A method according to Claim 18 wherein the truncated polypeptide is restricted to the first 300 amino acid residues of the glycoprotein D.